CASSETTE RECEIVER

KRC-309S/389/389W
KRC-409/479
KRC-489/489G

SERVICE MANUAL

KENWOOD

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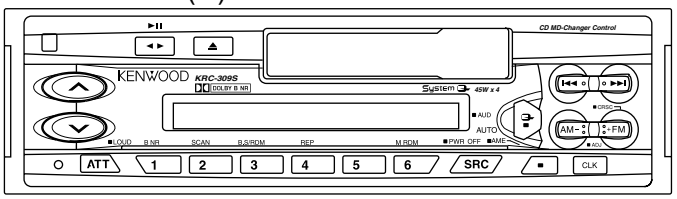
B51-7733-00 (K) 1733

KRC-309S (K)



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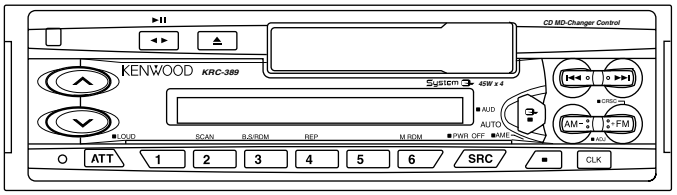

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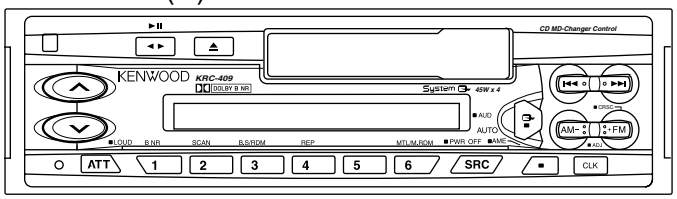

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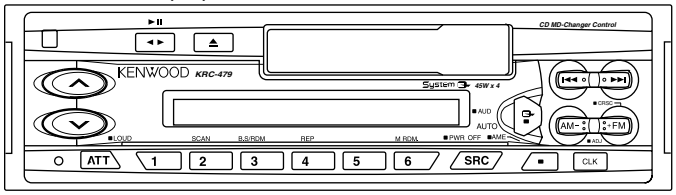

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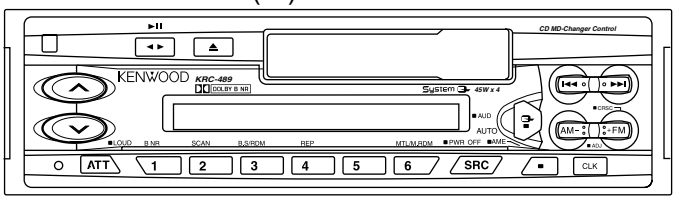
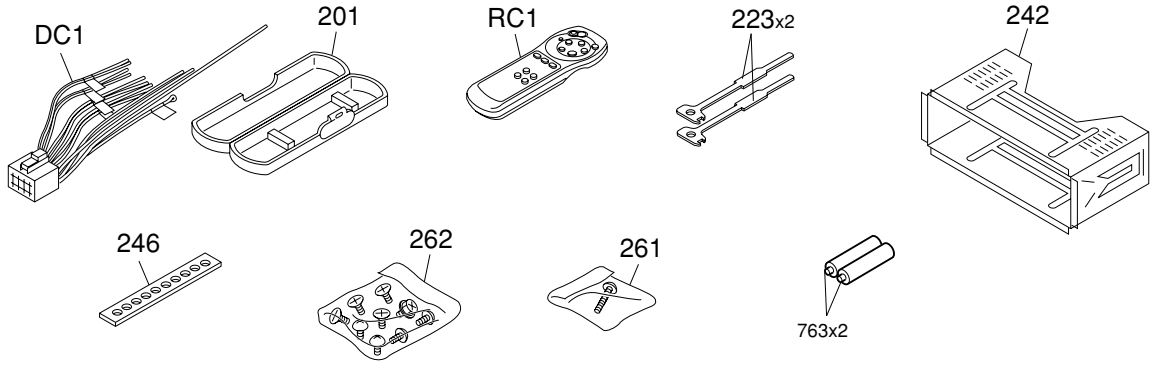


MECHANISM EXTENSION CORD
W05-0477-00 (7P)
W05-0609-00 (10P)

The following reference numbers with accessory parts are the same reference numbers used on EXPLODED VIEW and PARTS LIST.



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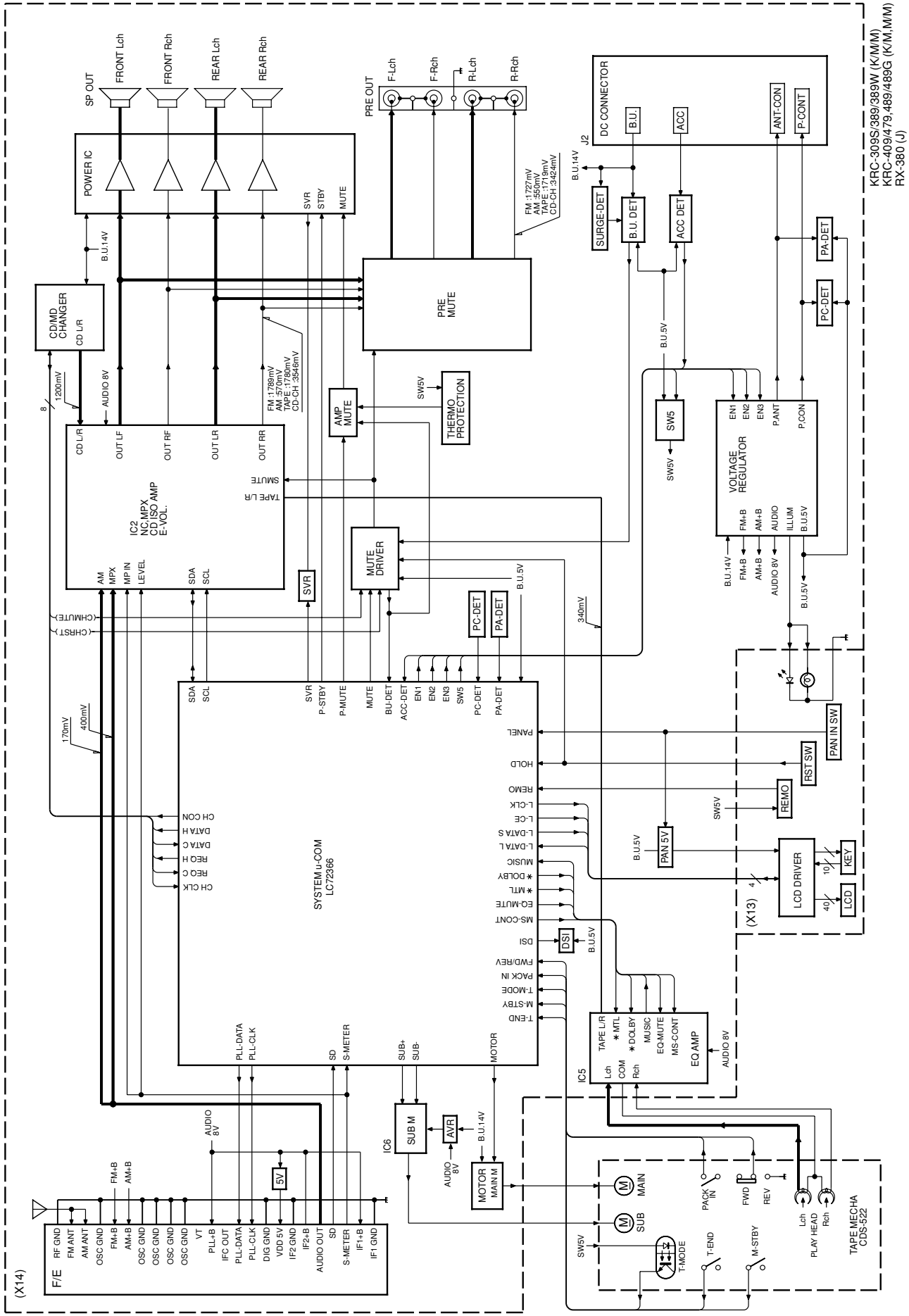
BLOCK DIAGRAM



COMPONENT DESCRIPTION

SYNTHESIZER UNIT (X14-639x-xx)

REF No.	FUNCTION	OPERATION
IC1	SYSTEM µ-COM	Controls FM/AM tuner, the changer, cassette mechanism, volume and tone.
IC2	E-VOLUME	Controls the source, volume, tone and FM multiplex detector.
IC4	POWER AMPLIFIER	Amplifies the front L/R and the rear L/R to 45W maximum.
IC5	EQUALIZER AMPLIFIER	Equalizes the tape sound (120uSec.).
IC6	SUB MOTOR DRIVER	Controls the sub motor.
IC7	AVR	B.U.:5V, AUD:8V, FM+B:8V, AM+B:8V
IC10	MUTE CONTROL LOGIC	Controls logic.
Q10	BACK-UP DETECTION	Output becomes "L" when the back-up voltage becomes more than 9V. Output becomes "H" when the back-up voltage becomes less than 9V (momentary power down).
Q11	SERGE DETECTION	Output becomes "L" when the back-up voltage becomes more then 18V (Momentary power down). Output becomes "H" when the back-up voltage becomes less than 18V.
Q41	PRE MUTE DRIVER	When input becomes "L", output becomes "H" (Preout mute).
Q50	5V SW	Outputs 5V to the SW5V power supply when input becomes "L". SW5V power supply line is cut off when the input becomes "H".
Q51	POWER ANTENNA DETECTION	Output becomes "H" when P-ANT output is short-circuited (P-ANT OFF). Output becomes "L" when FM/AM signal does not exist.
Q52	P.CON. DETECTION	Output becomes "H" when P.CON output is short-circuited (P.CON OFF).
Q190	PANEL SW	Outputs 5V to the panel VDD line when panel is attached. Panel VDD line is cut off when panel is taken out.
Q191	DSI DRIVER	DSI lights when input becomes "L". DSI turns off when input becomes "H".DSI turns on and off when panel is taken off.
Q221-224	PRE MUTE	Works when input becomes "H". Being cancelled when input becomes "L".
Q251	SVR	"L" when input becomes "H".
Q501	SUB MOTOR AVR	Outputs 7.3V when AUD8V exists. Output does not exist when AUD8V does not exist.
Q551	MAIN MOTOR SW	Outputs 14V when input becomes "L" (Main motor drives).
Q552	MAIN MOTOR SW	Output becomes "H" when input becomes "L".

SWITCH UNIT (X13-986x-xx)

REF. No.	FUNCTION	OPERATION
IC1	LCD DRIVER	Scans LCD display control key.
IC2	REMOTE SENSOR	Sensors remote controller signal.
Q1	KEY SCAN SW	Scans key after receiving imitative key input signal.

MICROCOMPUTER'S TERMINAL DESCRIPTION

(X14-) IC1 : µ-COM

PORT No.	PORT NAME	I/O	FUNCTION	OPERATING CONDITION
1	X IN	I	Clock : 4.5MHz.	
2	GND	-	GND.	
3	L-DATA L	I	LCD driver data.	
4	L-DATA S	O	LCD driver data.	
5	L-CLK	O	LCD driver clock.	
6	L-CE	O	LCD driver chip enable.	
7	$\overline{\text{PANEL}}$	I	Panel detection.	
8	PLL-DATA	I/O	Tuner data.	
9	PLL-CLK	O	Tuner clock.	
10	SD	I	Tuner band muting.	
11	CH-DATA C	I	5-line CD-CH communication data.	
12	CH-DATA H	O	5-line CD-CH communication data.	
13	CH-CLK	I/O	5-line CD-CH communication clock.	
14	$\overline{\text{CH-REQ C}}$	I	5-line CD-CH communication request.	
15	MOTOR	O	Cassette mechanism main motor.	
16-20	-	-	-	
21	CH-CON	O	5-line CD-CH communication control.	
22	$\overline{\text{CH-REQ H}}$	O	5-line CD-CH communication request.	
23	MUTE	O	Muting.	
24	IC2-SCL	O	IC2 clock.	
25,26	-	-	-	
27	IC2 TYPE 0	I	Model discrimination.	
28	-	-	-	
29	TYPE 1	I	destination discrimination.	
30	TYPE 0	I	destination discrimination.	
31	VDD	-	Power supply.	
32	IC2-SDA	I/O	IC2 data.	
33	$\overline{\text{SW 5V}}$	O	SW 5V control.	
34	$\overline{\text{P-MUTE}}$	O	Power IC muting.	
35	P-STBY	O	Power IC stand-by.	
36	SVR	O	Power IC discharge control.	
37	EN1	O	Power supply IC contol.	
38	EN3-1	O	Power supply IC contol.	
39	EN3-0	O	Power supply IC contol.	
40	EN2-1	O	Power supply IC contol.	

MICROCOMPUTER'S TERMINAL DESCRIPTION

(X14-) IC1 : µ-COM

PORT No.	PORT NAME	I/O	FUNCTION	OPERATING CONDITION
41	EN2-0	O	Power supply IC control.	
42	-	-	-	
43	MS-CONT	O	Tape signal sensitivity switch.	
44	BEEP	O	Beep.	
45	BU-DET	I	Back-up detection.	
46	P.CON-DET	I	Power control short-circuited detection.	
47	P.ANT-DET	I	Power antenna short-circuited detection.	
48	$\overline{\text{MUSIC}}$	I	Tape signal detection.	
49	METAL	O	Normal/Metal tape switch.	
50	DOLBY	O	Dolby switch.	
51	EQ-MUTE	O	Tape equalizer muting.	
52	FWD/$\overline{\text{REV}}$	I	Cassette mechanism running direction.	
53,54	-	-	-	
55	PACK-IN	I	Cassette mechanism pack-in.	
56	$\overline{\text{REMOTE}}$	I	Remote signal shape.	
57	-	-	-	
58	DSI	O	Disable System Indicator.	
59	SUB+	O	Cassette mechanism sub motor.	
60	SUB-	O	Cassette mechanism sub motor.	
61,62	-	-	-	
63	IC2 TYPE 1	I	Model switching.	
64	T-MODE	I	Cassette mechanism mode pulse.	
65	ACC-DET	I	ACC detection.	
66	S-METER	I	Tuner signal meter.	
67	$\overline{\text{HOLD}}$	I	Clock stop mode.	
68	VDD	-	VDD.	
69	M-STBY	I	Cassette mechanis stand-by.	
70	$\overline{\text{T-END}}$	I	Cassette mechanism end.	
71,72	-	-	-	
73	VDD	-	VDD.	
74-76	GND	-	GND.	
77,78	-	-	-	
79	GND	-	GND.	
80	X OUT	O	Clock 4.5MHz.	

TEST MODE

1. How to enter the test mode

- Reset the unit while holding the “FM” key and preset “6” key.
- Turn on the power while holding the “FM” key and preset “6” key in conditions of ACC ON and Panel ON.
- All indication segments should go ON at the beginning of the test mode.

2. How to release the test mode

- Simply reset the unit.
- Turn on the power after being in conditions of ACC OFF, power OFF, momentary power down and the panel off.

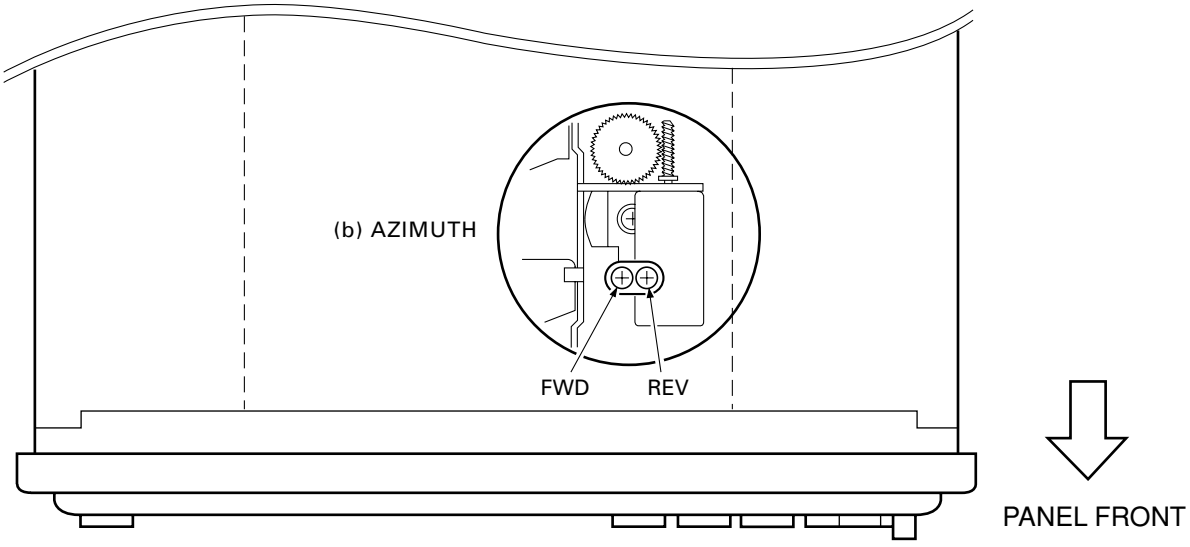
3. Audio adjustment

- Enter the audio mode by pressing the "AUD" key.
- Set the volume level to be +5dB. In that case, “30” should be shown on the display.
- Loudness OFF.
- The BASS/MIDDLE/TREBLE and BALANCE/FADER can be adjusted to the full-boost/full-cut and full-front/full-rear each by pressing the “UP” and “DOWN” keys in 3 steps range.

ADJUSTMENT

BALANCE/FADER/BASS/TREBLE : CENTER
T.ADV/METAL/DOLBY NR/AUTO : OFF

No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	RECEIVER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
CASSETTE DECK SECTION							
1	AZIMUTH	TCC-153 10KHz	SP OUT	TAPE PLAY	Head azimuth screw (FWD/REV) (ME1)	Adjust so that output level in playing "FWD" and "REV" becomes maximum each.	(b)
2	DOLBY (PLAY BACK LEVEL)	TCC-130	Connect an AC voltmeter to CN5 (X14-)	TAPE PLAY	VR1 (L ch) VR2 (R ch) (X14-)	300mv	

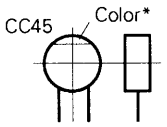


PARTS DESCRIPTIONS

CAPACITORS

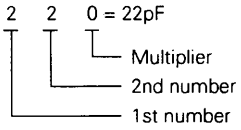
CC 45 TH 1H 220 J
1 2 3 4 5 6

1 = Type ... ceramic, electrolytic, etc.
2 = Shape ... round, square, ect.
3 = Temp. coefficient
4 = Voltage rating
5 = Value
6 = Tolerance



• Capacitor value

010 = 1pF
100 = 10pF
101 = 100pF
102 = 1000pF = 0.001μF
103 = 0.01μF



• Temperature coefficient

1st Word	C	L	P	R	S	T	U
Color*	Black	Red	Orange	Yellow	Green	Blue	Violet
ppm/°C	0	-80	-150	-220	-330	-470	-750

2nd Word	G	H	J	K	L
ppm/°C	±30	±60	±120	±250	±500

Example : CC45TH = -470 ± 60ppm/°C

• Tolerance (More than 10pF)

Code	C	D	G	J	K	M	X	Z	P	No code
(%)	±0.25	±0.5	±2	±5	±10	±20	+40 -20	+80 -20	+100 -0	More than 10μF - 10 ~ +50 Less than 4.7μF -10 ~ +75

(Less than 10pF)

Code	B	C	D	F	G
(pF)	±0.1	±0.25	±0.5	±1	±2

• Voltage rating

2nd word / 1st word	A	B	C	D	E	F	G	H	J	K	V
0	1.0	1.25	1.6	2.0	2.5	3.15	4.0	5.0	6.3	8.0	-
1	10	12.5	16	20	25	31.5	40	50	63	80	35
2	100	125	160	200	250	315	400	500	630	800	-
3	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000	-

• Chip capacitors

(EX) C C 7 3 F S L 1 H 0 0 0 J
1 2 3 4 5 6 7
(Chip) (CH, RH, UJ, SL)

(EX) C K 7 3 F F 1 H 0 0 0 Z
1 2 3 4 5 6 7
(Chip) (B, F)

Refer to the table above.
1 = Type
2 = Shape
3 = Dimension
4 = Temp. coefficient
5 = Voltage rating
6 = Value
7 = Tolerance

Dimension (Chip capacitors)

Dimension code	L	W	T
Empty	5.6 ± 0.5	5.0 ± 0.5	Less than 2.0
A	4.5 ± 0.5	3.2 ± 0.4	Less than 2.0
B	4.5 ± 0.5	2.0 ± 0.3	Less than 2.0
C	4.5 ± 0.5	1.25 ± 0.2	Less than 1.25
D	3.2 ± 0.4	2.5 ± 0.3	Less than 1.5
E	3.2 ± 0.2	1.6 ± 0.2	Less than 1.25
F	2.0 ± 0.3	1.25 ± 0.2	Less than 1.25
G	1.6 ± 0.2	0.8 ± 0.2	Less than 1.0

RESISTORS

• Chip resistor (Carbon)

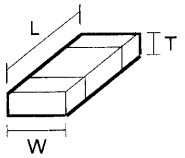
(EX) R K 7 3 E B 2 B 0 0 0 J
1 2 3 4 5 6 7
(Chip) (B,F)

• Carbon resistor (Normal type)

(EX) R D 1 4 B B 2 C 0 0 0 J
1 2 3 4 5 6 7

1 = Type
2 = Shape
3 = Dimension
4 = Temp. coefficient
5 = Rating wattage
6 = Value
7 = Tolerance

Dimension



Dimension (Chip resistor)

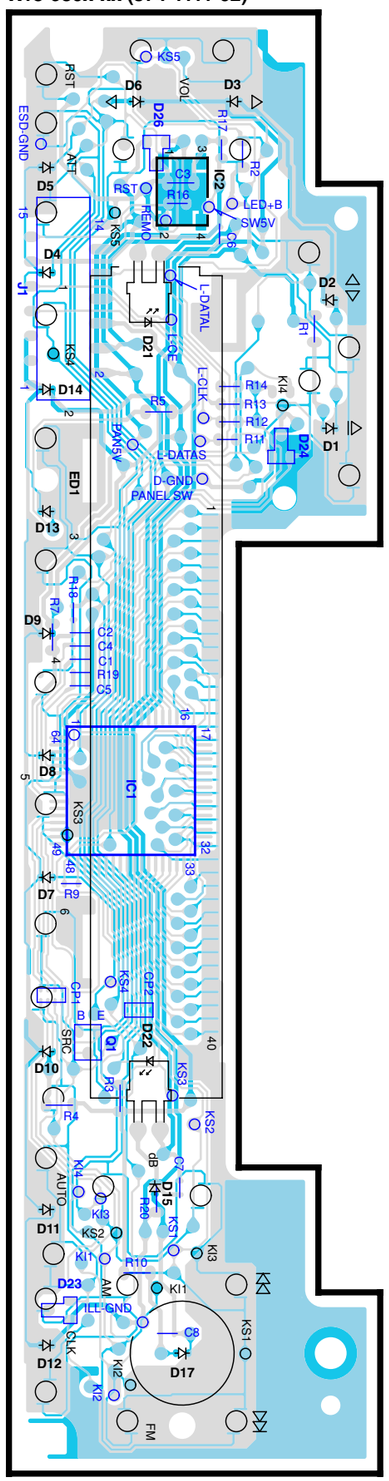
Dimension code	L	W	T
E	3.2 ± 0.2	1.6 ± 0.2	1.0
F	2.0 ± 0.3	1.25 ± 0.2	1.0
G	1.6±0.2	0.8±0.2	0.5±0.1

Rating wattage

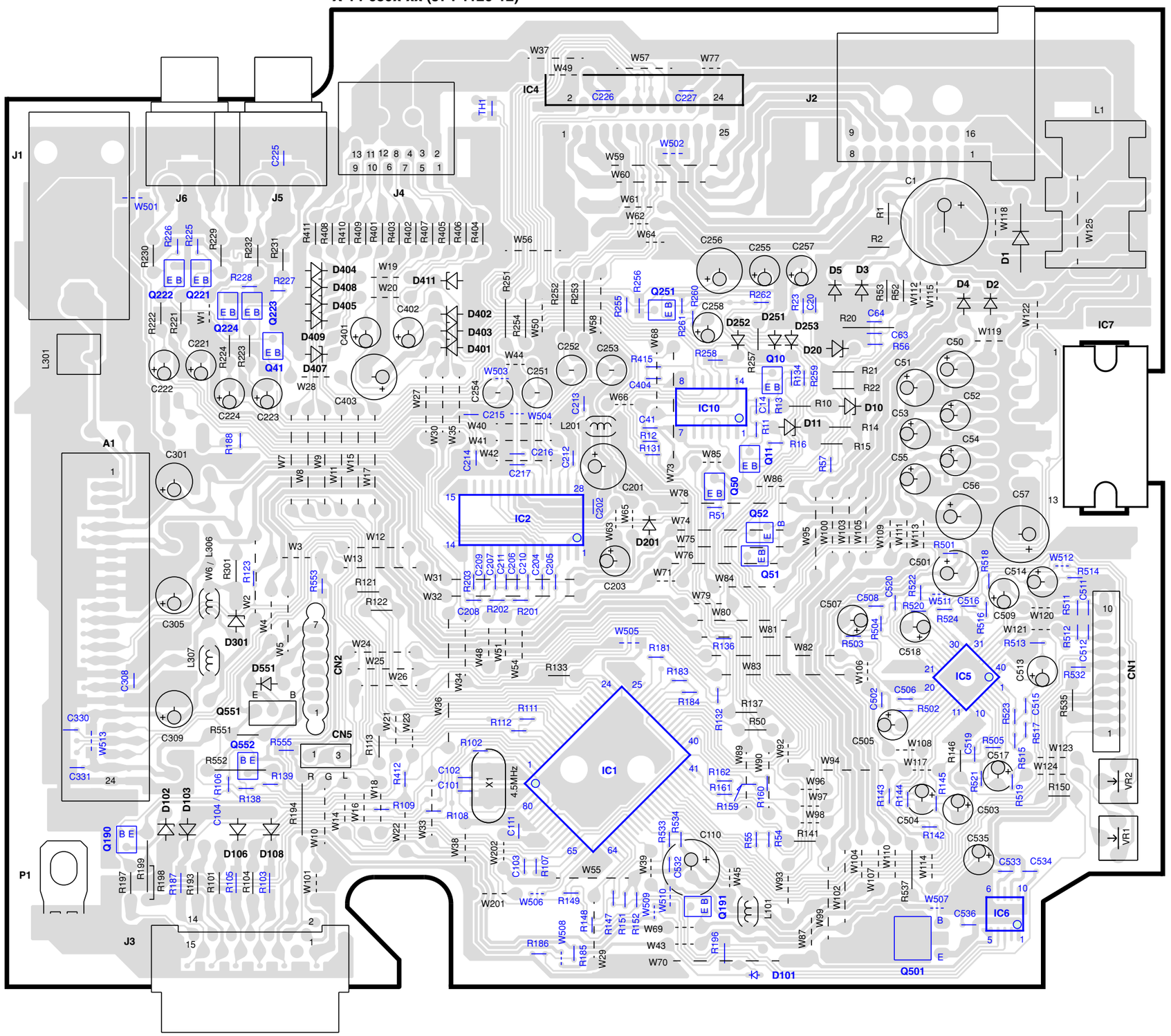
Code	Wattage	Code	Wattage	Code	Wattage
1J	1/16W	2C	1/6W	3A	1W
2A	1/10W	2E	1/4W	3D	2W
2B	1/8W	2H	1/2W		

PC BOARD (Component side view)

SWITCH UNIT
X13-986x-xx (J74-1111-02)



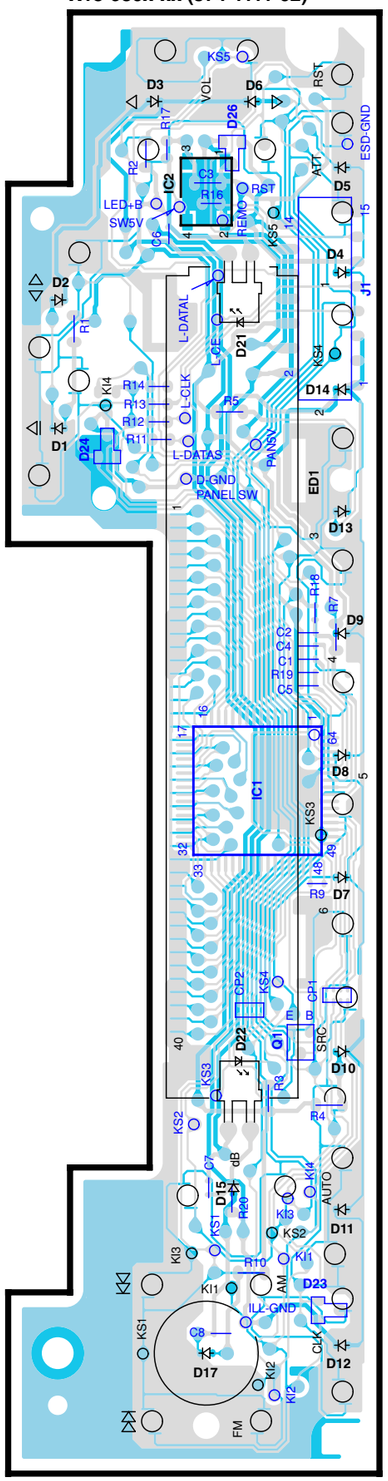
SYNTHESIZER UNIT
X-14-639x-xx (J74-1120-12)



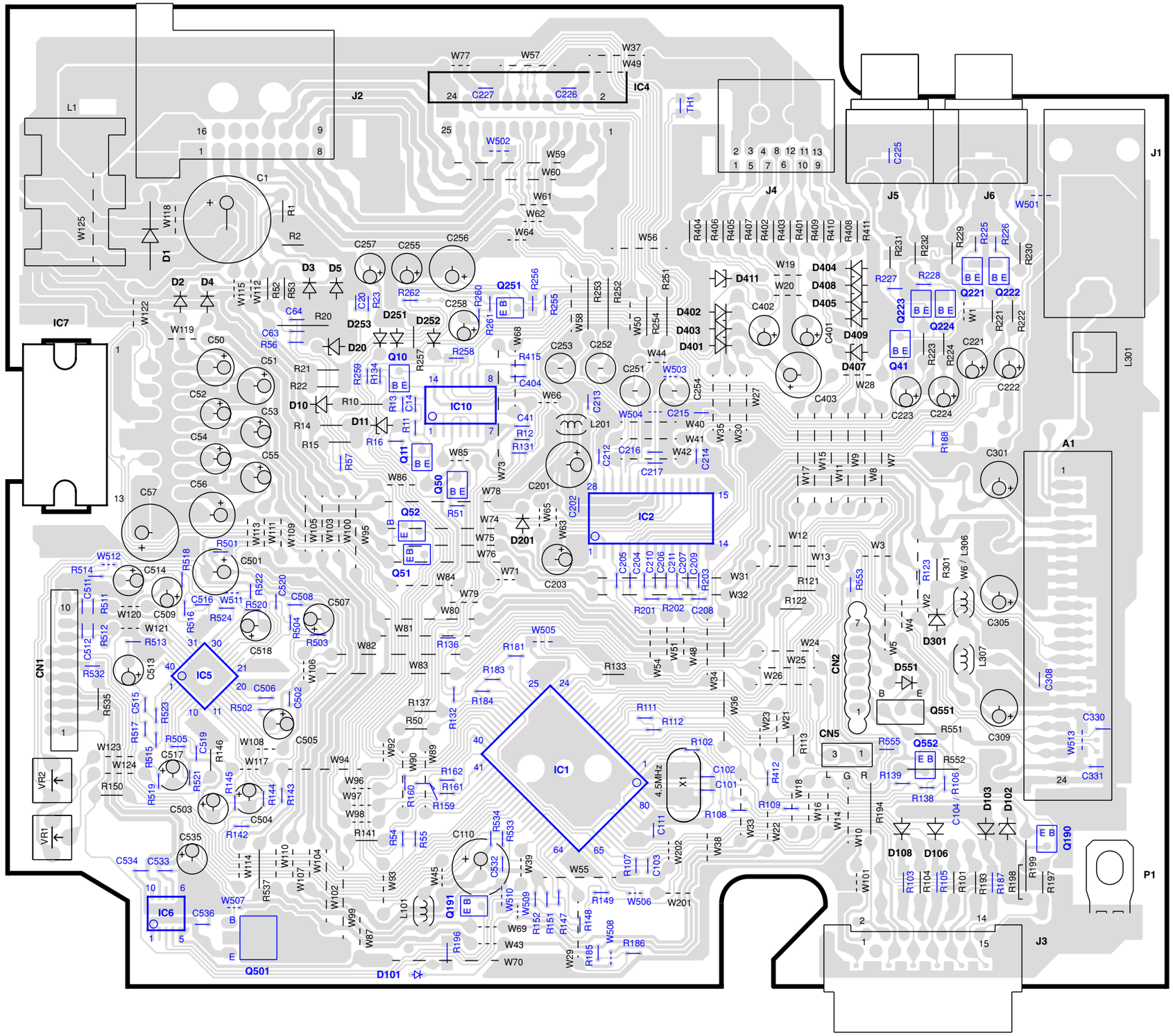
Refer to the schematic diagram for the value of resistors and capacitors.

PC BOARD(Foil side view)

SWITCH UNIT
X13-986x-xx (J74-1111-02)



SYNTHESIZER UNIT
X-14-639x-xx (J74-1120-12)

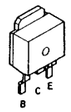


Refer to the schematic diagram for the value of resistors and capacitors.

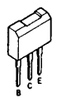
CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts ⚠(refer to parts list).indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

DTA114EK 2SA1036K
DTC114YUA 2SD1819A
DTC143TUA
UN5114
UN5211
UN5214
UN5216

2SD1760



2SB1443



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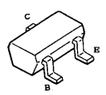
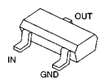
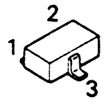


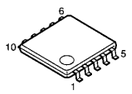
DTA124EUA
DTC114EUA
KRA102S

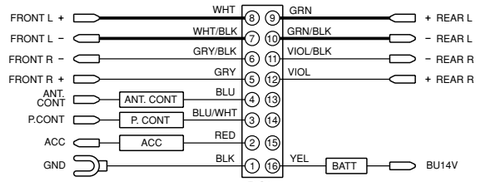


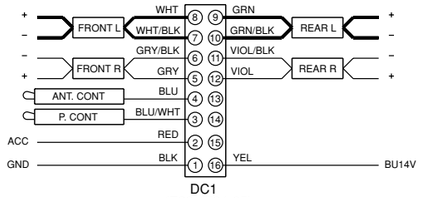
DTA114YUA

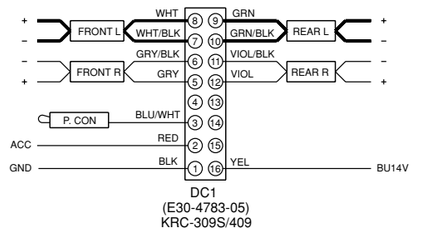


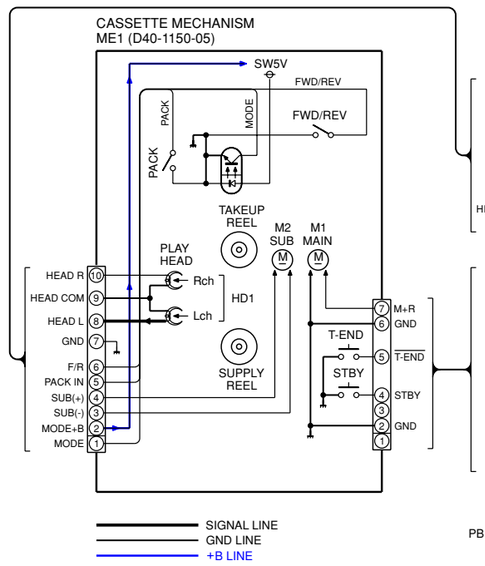
LB1930M

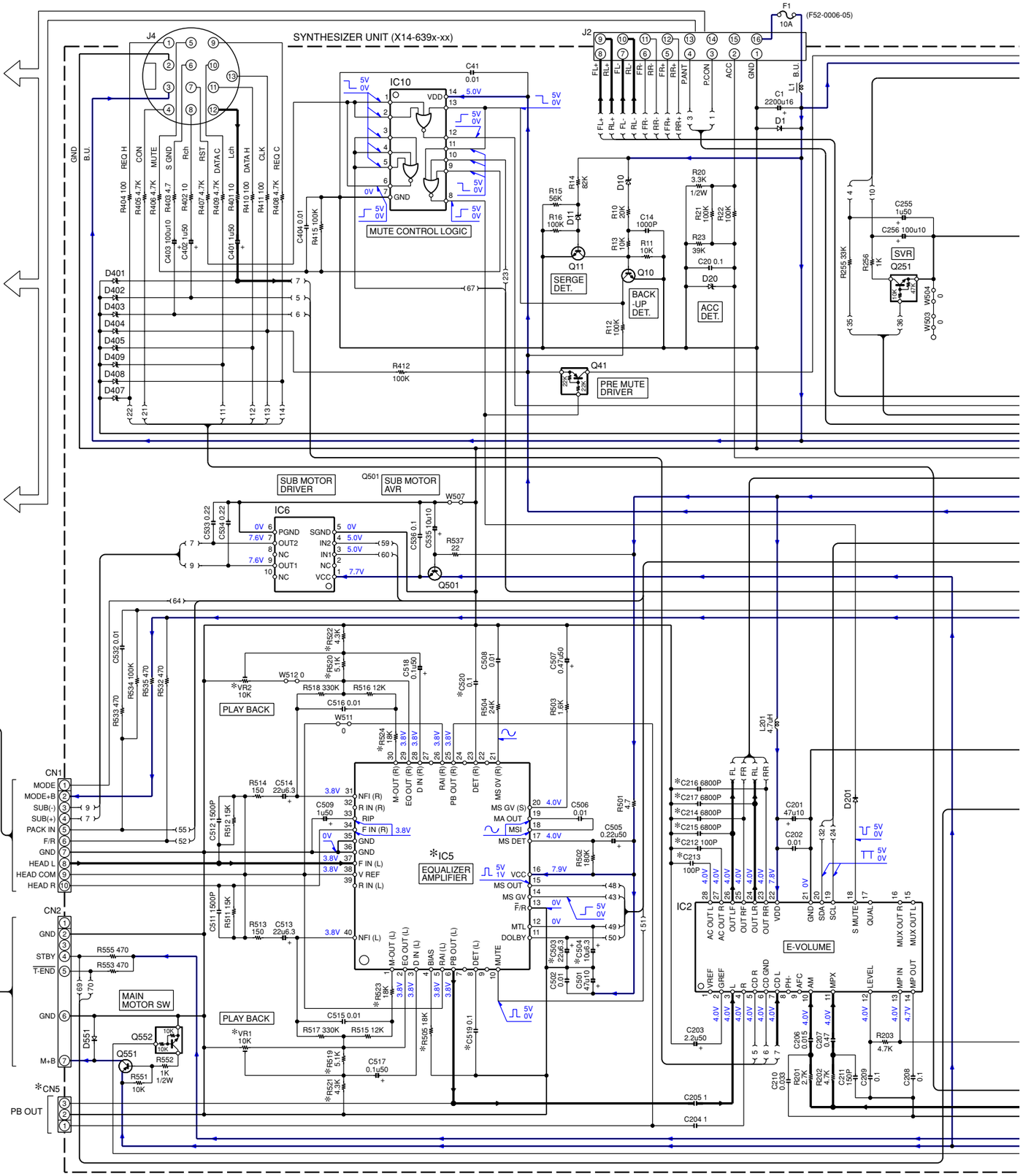












K L M N O P Q R S T

PRE OUT

IC4 POWER AMPLIFIER

Q221-224 PRE MUTE

IC1 SYSTEM u-COM

P.CON. DETECTION

POWER ANTENNA DETECTION

DSI DRIVER

PANEL SW

AVR IC7

IC1 : ✻
IC2 : TDA7407D
IC4 : TDA7386
IC5 : ✻
IC6 : LB1930M
IC7 : TDA3682ST
IC10 : HD74HC27FP

Q10,11,51,52 : 2SC4081
Q41 : DTA124EUA
Q50 : 2SA1036K
Q190,191 : DTA114YUA
Q221-224 : DTC143TUA
Q251 : DTC114YUA
Q501 : 2SD1760
Q551 : 2SB1443
Q552 : DTC114EUA

D1 : S2V20 ✻ A
D2,4 : 1GWJ43 (TPB5)
D3,5,551 : AM01Z
D10,11,401,402 : MA4068(N)-M
D20 : MA4051-L
D101 : B30-1567-05
D102,103,106,108, 403-405,407-409 : MA4062-L
D201,251-253 : 1SS133
D301 : MA4051 (N)-M

(X14-639x-xx)

MODEL NAME	UNIT No.	Ⓐ	Ⓑ	Ⓒ	Ⓓ	CN5	J3	IC1	IC5	Q190
KRC-409	0-10	YES	NO	YES	NO	YES	E58-0879-05	LC72366-9996	HA12216F	YES
KRC-489	0-21	YES	NO	YES	YES	YES	E58-0879-05	LC72366-9996	HA12216F	YES
KRC-489G										
KRC-309S	0-11	NO	YES	YES	NO	YES	E58-0879-05	LC72366-9996	HA12216F	YES
KRC-389	0-22	NO	YES	YES	YES	NO	E58-0879-05	LC72366-9996	HA12221F	YES
KRC-389W										
KRC-479										
RX-380	0-01	NO	YES	NO	YES	YES	E58-0880-05	LC72366-9995	HA12216F	NO

MODEL NAME	UNIT No.	D4,5	D102,103, 106,108	VR1,2	R2	R106, 199	R144, 523,524	R145, 505	R183	R184	R197, 198
KRC-409	0-10	NO	YES	YES	NO	NO	YES	YES	NO	NO	YES
KRC-489	0-21	YES	YES	YES	YES	NO	YES	YES	YES	NO	YES
KRC-489G											
KRC-309S	0-11	NO	YES	YES	NO	NO	NO	YES	NO	YES	YES
KRC-389	0-22	YES	YES	NO	YES	NO	NO	NO	YES	YES	YES
KRC-389W											
KRC-479											
RX-380	0-01	YES	NO	YES	YES	YES	YES	YES	NO	NO	NO

MODEL NAME	UNIT No.	R519 -522	L306	C51	C104	C212-217, 308	C503, 519,520	C504	W6	A1
KRC-409	0-10	NO	NO	NO	YES	NO	YES	YES	YES	X86-3280-11
KRC-489	0-21	NO	NO	YES	YES	NO	YES	YES	YES	X86-3280-11
KRC-489G										
KRC-309S	0-11	NO	NO	NO	YES	NO	YES	NO	YES	X86-3280-11
KRC-389	0-22	YES	NO	YES	YES	NO	NO	NO	YES	X86-3280-11
KRC-389W										
KRC-479										
RX-380	0-01	NO	YES	YES	NO	YES	YES	YES	NO	X86-3280-01

KRC-309S/389/389W (K/M/M) (1/2)
KRC-409/479,489/489G (K/M,M/M) (1/2)
RX-380 (J) (1/2)

KRC-309S/389/389W,409/479,489/489G

KENWOOD

X25-J3 1/2 A

SWITCH UNIT (X13-986x-xx)

SUB-ILL

R1 330 R2 330 R3 330 R4 330 R5 510 R8 330 R6 330 R10 360

D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 D11 D12 D13 D14 D18 D19 D20 D16 D17 D15

PL1 PL2 C C8 0.01

D21 D22 C6 0.01 C7 0.01 R20 270

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts ⚠(refer to parts list).indicates safety critical components. For continued protection against risk of fire, replace only with same type and rating fuse(s). To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

KI1 VOL+ 6 SRC

KI2 VOL- ATT 5 AUTO FM

KI3 1 4 dB

KI4 2 3 CLK AM

KS5 KS4 KS3 KS2 KS1

S16 S15 S14 S13 S12 S11 S10 S9 S8 S7 S6 S5 S4 S3 S2 S1 KEY

S17 S18 S19 S20 S21 S22 S23 S24 S25 S26 S27 S28 S29 S30 S31 S32

S33 S34 S35 S36 S37 S38 S39 S40 COM1 COM2 COM3 KS1 KS2 KS3 KS4 KS5

LCD DRIVER IC1

DATAS CLK CE DATAL OSC VSS VDD1 VDD2 VDD TEST KI5 KI4 KI3 KI2 KI1 KS6

5V 0V 5V 3V 0V 1.7V 3.3V 5.0V

C5 1000P R19 56K R18 4.7K C1 0.047 C4 0.047 R7 4.7 C2 0.01 CP1 1K

CP2 1K R9 1K Q1 10K 10K

KEY SCAN SW

D24 D23 D26

REMOTE SENSOR

RESET R17 47 R16 1K C3 2.2

IC2 OUT GND VCC GND 4.8V 0V 0V 5.0V

R11 470 R12 470 R13 470 R14 470

J1

1 ILL-GND
2 D-GND
3 NC
4 SW 5V
5 LAMP+B
6 LED+B
7 L-DATAS
8 L-CLK
9 L-CE
10 L-DATAL
11 PAN 5V
12 RST
13 REMOTE
14 PANEL SW
15 ESD-GND

*ED1

(X13-986x-xx)

MODEL NAME	UNIT No.	Ⓒ	D1-15	D16, 18-20	D17	D21,22	R6,8	R10, 20	C6-8	ED1
KRC-409(K)	0-10	NO	B30-1533-05	NO	B30-1564-05	B30-1572-05	NO	YES	YES	B38-1055-05
KRC-489(M)		NO	B30-1533-05	NO	B30-1564-05	B30-1572-05	NO	YES	YES	B38-1055-05
KRC-489G(M)		NO	B30-1533-05	NO	B30-1564-05	B30-1572-05	NO	YES	YES	B38-1055-05
KRC-309S(K)	0-11	YES	B30-1533-05	YES	B30-1533-05	NO	YES	NO	NO	B38-1055-05
KRC-389(M)		YES	B30-1533-05	YES	B30-1533-05	NO	YES	NO	NO	B38-1055-05
KRC-389W(M)		YES	B30-1533-05	YES	B30-1533-05	NO	YES	NO	NO	B38-1055-05
KRC-479(M)	0-21	NO	B30-1567-05	NO	B30-1574-05	B30-1614-05	NO	YES	YES	B38-1056-05
RX-380(J)	0-01	NO	B30-1533-05	NO	B30-1564-05	B30-1572-05	NO	YES	YES	B38-1055-05

IC1 : LC75853NE
IC2 : RS-171

Q1 : DTA114EK

D1-15 : ✻
D16,18-20 : B30-1533-05
D17 : ✻
D21,22 : ✻
D23,24,26 : MA3062WA

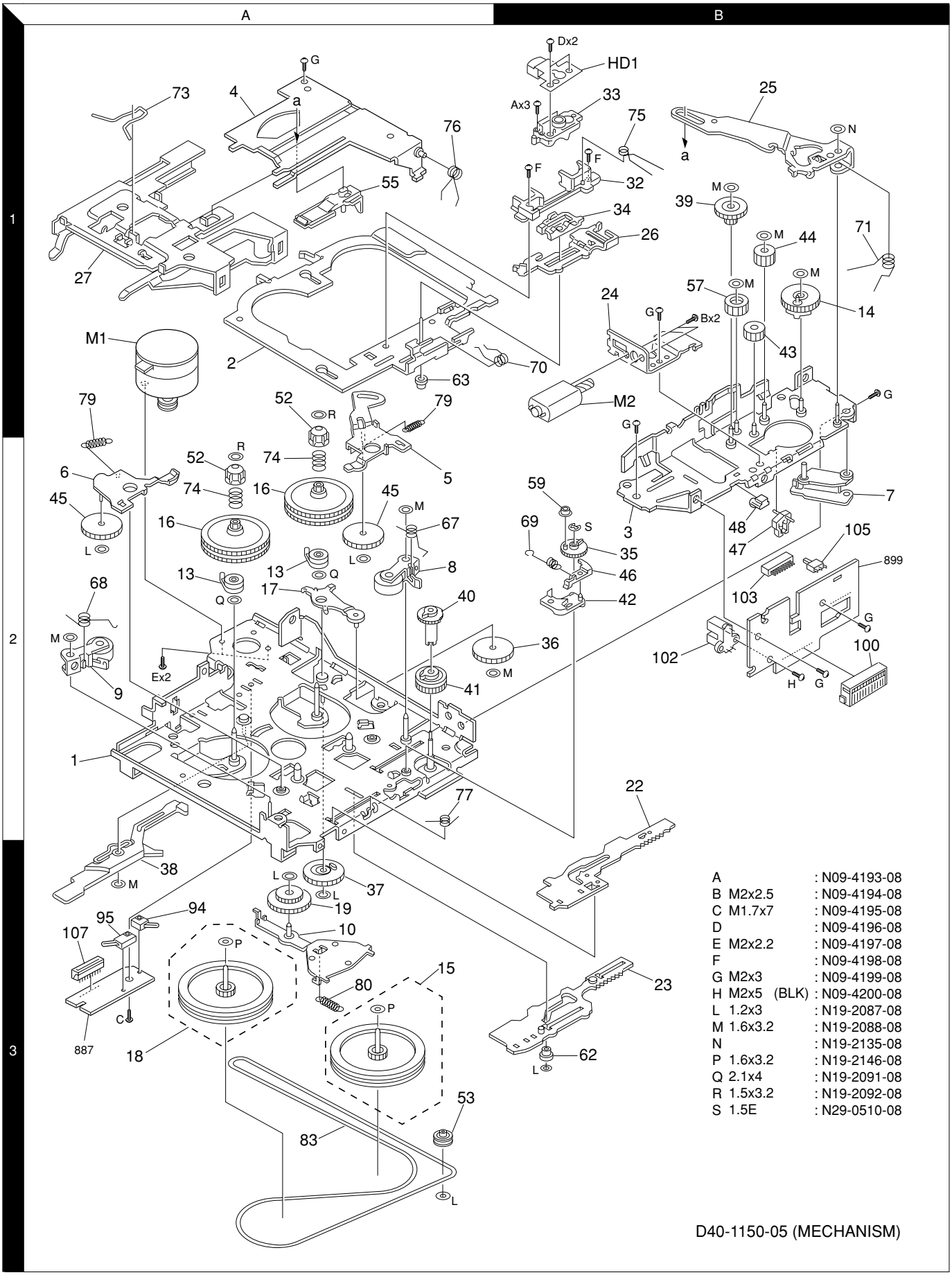
+B LINE

KRC-309S/389/389W (K/M/M) (2/2)
KRC-409/479,489/489G (K/M,M/M) (2/2)
RX-380 (J) (2/2)

KRC-309S/389/389W,409/479,489/489G

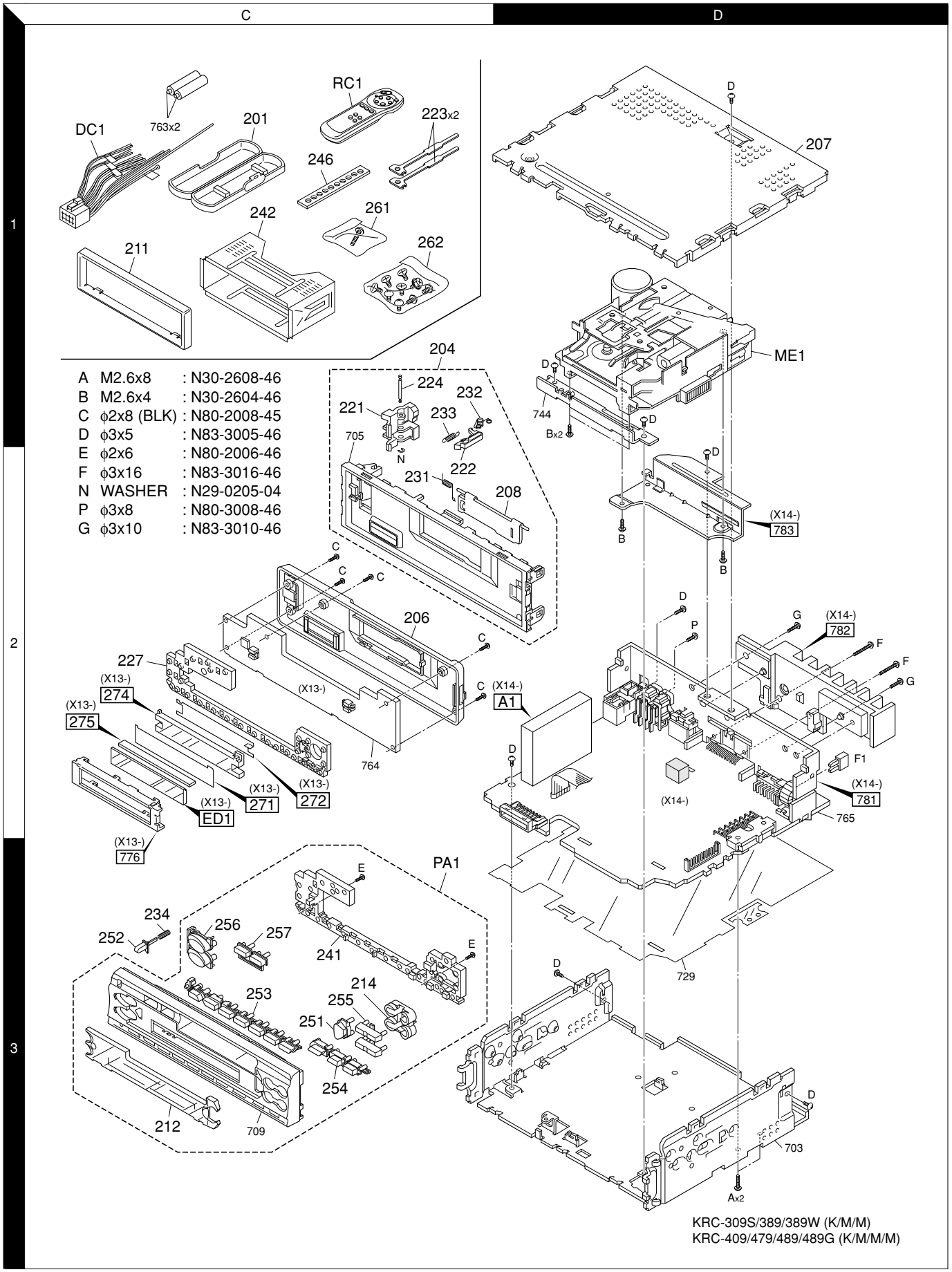
KENWOOD

EXPLODED VIEW (MECHANISM)



Parts with exploded numbers larger than 700 are not supplied.

EXPLODED VIEW (UNIT)



KRC-309S/389/389W (K/M/M)
KRC-409/479/489/489G (K/M/M/M)

Parts with exploded numbers larger than 700 are not supplied.

PARTS LIST

✻ New Parts
Parts without **Part No.** are not supplied.
Les articles non mentionnes dans le **Parts No.** ne sont pas fournis.
Teile ohne **Parts No.** werden nicht geliefert.

Ref. No.	Add	New	Parts No.	Description	Destination
KRC-309S/389/389W,409/479,489/489G					
201	1C		A02-1486-13	PLASTIC CABINET ASSY	
204	2C	✻	A22-2861-03	SUB PANEL ASSY	
206	2C	✻	A46-1693-01	REAR COVER	
207	1D	✻	A52-0781-02	TOP PLATE	
208	2D	✻	A53-1687-03	CASSETTE LID	
PA1	2C	✻	A64-2178-02	PANEL ASSY	K
PA1	2C	✻	A64-2179-02	PANEL ASSY	K1
PA1	2C	✻	A64-2181-02	PANEL ASSY	M1
PA1	2C	✻	A64-2182-02	PANEL ASSY	M2
PA1	2C	✻	A64-2192-02	PANEL ASSY	M3
PA1	2C	✻	A64-2194-02	PANEL ASSY	M4
PA1	2C	✻	A64-2195-02	PANEL ASSY	M
RC1	1C		A70-0883-05	REMOTE CONTROLLER ASSY	M1M3
211	3C	✻	B07-3001-02	ESCUTCHEON	K1M2K
211	3C	✻	B07-3001-02	ESCUTCHEON	M1
211	3C	✻	B07-3003-02	ESCUTCHEON	M3
211	3C	✻	B07-3022-02	ESCUTCHEON	M4
211	3C	✻	B07-3023-02	ESCUTCHEON	M
212	3C	✻	B10-3276-01	FRONT GLASS	K
212	3C	✻	B10-3277-01	FRONT GLASS	K1
212	3C	✻	B10-3279-01	FRONT GLASS	M1M3
212	3C	✻	B10-3280-01	FRONT GLASS	M2M
212	3C	✻	B10-3287-01	FRONT GLASS	M4
214	3C	✻	B19-2105-04	LIGHTING BOARD	
-			B46-0100-50	WARRANTY CARD	
-			B46-0606-04	ID CARD	
-			B58-1344-04	CAUTION CARD	K1
-		✻	B64-1826-00	INST. MANUAL (ENG,FRE,SPA,POR)	K1K
-		✻	B64-1827-00	INST. MANUAL (ENGLISH,CHINESE)	M2MM1
-		✻	B64-1827-00	INST. MANUAL (ENGLISH,CHINESE)	M3M4
-		✻	B64-1828-00	INST. MANUAL (ARABIC)	M2MM1
-		✻	B64-1828-00	INST. MANUAL (ARABIC)	M3M4
221	1C		D10-4446-03	LEVER	
222	2D		D10-4447-03	LEVER	
223	1C		D10-4589-04	LEVER	
224	1C		D21-2329-04	SHAFT	
ME1	1D	✻	D40-1150-05	CASSETTE MECHANISM ASSY	
227	2C	✻	E29-1826-02	CONDUCTIVE RUBBER	
⚠ DC1	1C	✻	E30-4783-05	DC CORD	K1K
⚠ DC1	1C	✻	E30-4784-05	DC CORD	M2MM1
⚠ DC1	1C	✻	E30-4784-05	DC CORD	M3M4
⚠ F1	2D		F52-0006-05	FUSE (MINI BLADE TYPE) (10A)	
⚠ F1	2D		F52-0011-05	FUSE (MINI BLADE TYPE) (10A)	
231	2C		G01-2525-04	TORSION COIL SPRING	
232	1C		G01-2987-04	TORSION COIL SPRING	
233	1C		G01-2988-04	EXTENSION SPRING	
234	3C		G01-2990-04	COMPRESSION SPRING (RELEASE)	
-		✻	H12-2685-01	PACKING FIXTURE	
-		✻	H12-2686-01	PACKING FIXTURE	
-			H25-0329-04	PROTECTION BAG (280X450X0.03)	
-			H25-0337-04	PROTECTION BAG (180X300X0.03)	
-		✻	H54-1920-03	ITEM CARTON CASE (KRC-409)	K
-		✻	H54-1921-03	ITEM CARTON CASE (KRC-309S)	K1
-		✻	H54-1923-03	ITEM CARTON CASE (KRC-489)	M1
-		✻	H54-1924-03	ITEM CARTON CASE (KRC-389)	M2
-		✻	H54-1925-03	ITEM CARTON CASE (KRC-489G)	M3
-		✻	H54-2034-03	ITEM CARTON CASE (KRC-479)	M4
-		✻	H54-2072-03	ITEM CARTON CASE (KRC-389W)	M
241	3C	✻	J19-5040-02	HOLDER	
242	1C		J21-9641-03	MOUNTING HARDWARE ASSY	
246	1C		J54-0606-04	STAY	
251	3C	✻	K24-3650-04	KNOB (Q)	
252	3C	✻	K24-3651-04	KNOB (RELEASE)	
253	3C	✻	K25-1228-03	KNOB (1,2,3,4,5,6,ATT)	
254	3C	✻	K25-1229-03	KNOB (SRC,AUTO,CLK)	
255	3C	✻	K25-1230-03	KNOB (FM,AM,UP,DOWN)	
256	3C	✻	K25-1231-03	KNOB (VOL)	
257	3C	✻	K25-1232-03	KNOB (EJECT,PROG)	
261	1C		N99-1610-15	SCREW SET (1-SCREW)	
262	1C		N99-1632-05	SCREW SET (9-SCREW)	
A	3D		N30-2608-46	PAN HEAD MACHINE SCREW	
B	1D		N30-2604-46	PAN HEAD MACHINE SCREW	
C	2C		N80-2008-45	PAN HEAD TAPTITE SCREW	
D	1D		N83-3005-46	PAN HEAD TAPTITE SCREW	
E	2C		N80-2006-46	PAN HEAD TAPTITE SCREW	
N	2C		N29-0205-04	RETAINING RING	
SWITCH UNIT (X13-986x-xx)					
271	2C	✻	B11-1325-04	OPTICAL DIFFUSER	K1M2MK
271	2C	✻	B11-1325-04	OPTICAL DIFFUSER	M1M3
271	2C	✻	B11-1334-04	OPTICAL DIFFUSER	M4
272	2C	✻	B11-1326-04	REFLECTION SHEET	
274	2C	✻	B19-2063-03	LIGHTING BOARD	
D1 -15			B30-1533-05	LED (PG)	KM1M3
D1 -15			B30-1567-05	LED (RED)	M4
D1 -20			B30-1533-05	LED (PG)	K1M2M
D17			B30-1564-05	LED (BLUE)	KM1M3
D17			B30-1574-05	LED (BLUE, HB)	M4
D21 ,22			B30-1572-05	LED (WHITE)	KM1M3
D21 ,22		✻	B30-1614-05	LED (BLUE)	M4
ED1	2C	✻	B38-1055-05	LIQUID CRYSTAL	K1M2MK
ED1	2C	✻	B38-1055-05	LIQUID CRYSTAL	M1M3
ED1	2C	✻	B38-1056-05	LIQUID CRYSTAL	M4
PL1 ,2			B30-1485-05	LAMP (5.5V, 0.125A)	K1M2M
PL1 ,2			B30-1543-05	LAMP (GRN, 5.5V, 0.125A)	K1M2M
C1			CK73GB1E473K	CHIP C 0.047UF K	
C1			CK73GB1H473K	CHIP C 0.047UF K	
C2			CK73GB1H103K	CHIP C 0.010UF K	
C3			CK73EB1C225K	CHIP C 2.2UF K	
C4			CK73GB1E473K	CHIP C 0.047UF K	
C4			CK73GB1H473K	CHIP C 0.047UF K	
C5			CK73GB1H102K	CHIP C 1000PF K	
C6 -8			CK73GB1H103K	CHIP C 0.010UF K	KM1M3
C6 -8			CK73GB1H103K	CHIP C 0.010UF K	M4
275	2C		E29-1828-04	CONDUCTIVE RUBBER	

E : Europe
K : North America
M : Other Areas

K : KRC-409
K1 : KRC-309S
M : KRC-389W

M1 : KRC-489
M2 : KRC-389
M3 : KRC-489G

M4 : KRC-479

⚠ indicates safety critical components.

PARTS LIST

✻ New Parts
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Teile ohne **Parts No.** werden nicht geliefert.

Ref. No.	Add	New	Parts No.	Description				Destination
J1			E59-0828-05	RECTANGULAR PLUG				
CP1 ,2			R90-0724-05	MULTI-COMP 1K			X4	
R1 -4			RK73EB2B331J	CHIP R	330	J	1/8W	
R5			RK73EB2B511J	CHIP R	510	J	1/8W	
R6			RK73EB2B331J	CHIP R	330	J	1/8W	K1M2M
R7			RK73EB2B4R7J	CHIP R	4.7	J	1/8W	
R8			RK73EB2B331J	CHIP R	330	J	1/8W	K1M2M
R9			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R10			RK73EB2B361J	CHIP R	360	J	1/8W	KM1M3
R10			RK73EB2B361J	CHIP R	360	J	1/8W	M4
R11 -14			RK73FB2A471J	CHIP R	470	J	1/10W	
R16			RK73FB2A102J	CHIP R	1.0K	J	1/10W	
R17			RK73FB2A470J	CHIP R	47	J	1/10W	
R18			RK73GB1J472J	CHIP R	4.7K	J	1/16W	
R19			RK73GB1J563J	CHIP R	56K	J	1/16W	
R20			RK73EB2B271J	CHIP R	270	J	1/8W	KM1M3
R20			RK73EB2B271J	CHIP R	270	J	1/8W	M4
D23 ,24			MA3062WA	ZENER DIODE				
D26			MA3062WA	ZENER DIODE				
IC1			LC75853NE	MOS-IC				
IC2			RS-171	ANALOGUE IC				
Q1			DTA114EK	DIGITAL TRANSISTOR				
Q1			KRA102S	DIGITAL TRANSISTOR				
Q1			UN2111	DIGITAL TRANSISTOR				

SYNTHESIZER UNIT (X14-639x-xx)

(X14-639x-xx)

Ref. No.	Add	New	Parts No.	Description				Destination
D101			B30-1567-05	LED (RED)				
C1			C90-5235-05	ELECTRO	2200UF	16WV		
C14			CK73GB1H102K	CHIP C	1000PF	K		
C20			CK73GB1C104K	CHIP C	0.10UF	K		
C20			CK73GB1H104K	CHIP C	0.10UF	K		
C41			CK73GB1H103K	CHIP C	0.010UF	K		
C50			CE04CW1V100M	ELECTRO	10UF	35WV		
C51			CE04CW1V100M	ELECTRO	10UF	35WV		M2MM1
C51			CE04CW1V100M	ELECTRO	10UF	35WV		M3M4
C52 -55			C90-2597-05	ELECTRO	10UF	16WV		
C56			CE04CW1H100M	ELECTRO	10UF	50WV		
C57			CE04CW1C101M	ELECTRO	100UF	16WV		
C63			CK73GB1H103K	CHIP C	0.010UF	K		
C64			CK73GB1H103K	CHIP C	0.010UF	K		M2MM1
C64			CK73GB1H103K	CHIP C	0.010UF	K		M3M4
C101,102			CC73GCH1H220J	CHIP C	22PF	J		
C103			CK73GB1C104K	CHIP C	0.10UF	K		
C103			CK73GB1H104K	CHIP C	0.10UF	K		
C104			CK73GB1H103K	CHIP C	0.010UF	K		
C110			CE04CW0J221M	ELECTRO	220UF	6.3WV		
C111			CK73GB1H103K	CHIP C	0.010UF	K		
C201			CE04CW1A470M	ELECTRO	47UF	10WV		
C202			CK73GB1H103K	CHIP C	0.010UF	K		
C203			C90-2610-05	ELECTRO	2.2UF	50WV		
C204,205			CK73GB0J105K	CHIP C	1.0UF	K		
C206			CK73GB1H153K	CHIP C	0.015UF	K		
C207			CK73GB1A474K	CHIP C	0.47UF	K		
C208,209			CK73GB1C104K	CHIP C	0.10UF	K		
C208,209			CK73GB1H104K	CHIP C	0.10UF	K		
C210			CK73GB1E333K	CHIP C	0.033UF	K		
C210			CK73GB1H333K	CHIP C	0.033UF	K		
C211			CC73GCH1H151J	CHIP C	150PF	J		
C221,222			C90-2597-05	ELECTRO	10UF	16WV		KM1M3
C223,224			C90-2597-05	ELECTRO	10UF	16WV		
C225			CK73GB1H103K	CHIP C	0.010UF	K		
C251-254			C90-5296-05	NP-ELECT	0.22UF	50WV		
C255			C90-2608-05	ELECTRO	1.0UF	50WV		
C256			CE04CW1A101M	ELECTRO	100UF	10WV		
C257			C90-2608-05	ELECTRO	1.0UF	50WV		
C258			C90-2935-05	ELECTRO	1.0UF	50WV		
C301			CE04DW1A470M	ELECTRO	47UF	10WV		
C305			CE04DW1A470M	ELECTRO	47UF	10WV		
C309			CE04DW1A470M	ELECTRO	47UF	10WV		
C401,402			C90-2608-05	ELECTRO	1.0UF	50WV		
C403			CE04CW1A101M	ELECTRO	100UF	10WV		
C404			CK73GB1H103K	CHIP C	0.010UF	K		
C501			CE04CW1A470M	ELECTRO	47UF	10WV		
C502			CK73GB1H103K	CHIP C	0.010UF	K		
C503			CE04CW0J220M	ELECTRO	22UF	6.3WV		K1KM1
C503			CE04CW0J220M	ELECTRO	22UF	6.3WV		M3
C504			C90-2592-05	ELECTRO	10UF	6.3WV		KM1M3
C505			C90-2604-05	ELECTRO	0.22UF	50WV		
C506			CK73GB1H103K	CHIP C	0.010UF	K		
C507			C90-2606-05	ELECTRO	0.47UF	50WV		
C508			CK73GB1H103K	CHIP C	0.010UF	K		
C509			C90-2608-05	ELECTRO	1.0UF	50WV		
C511,512			CK73GB1H152K	CHIP C	1500PF	K		
C513,514			CE04CW0J220M	ELECTRO	22UF	6.3WV		
C515,516			CK73GB1H103K	CHIP C	0.010UF	K		
C517,518			C90-2602-05	ELECTRO	0.10UF	50WV		
C519,520			CK73GB1C104K	CHIP C	0.10UF	K		K1KM1
C519,520			CK73GB1C104K	CHIP C	0.10UF	K		M3
C519,520			CK73GB1H104K	CHIP C	0.10UF	K		K1KM1
C519,520			CK73GB1H104K	CHIP C	0.10UF	K		M3
C532			CK73GB1H103K	CHIP C	0.010UF	K		
C533,534			CK73GB1A224K	CHIP C	0.22UF	K		
C535			C90-2594-05	ELECTRO	10UF	10WV		
C536			CK73GB1C104K	CHIP C	0.10UF	K		
C536			CK73GB1H104K	CHIP C	0.10UF	K		
CN1			E40-9541-05	PIN ASSY				
CN5			E40-9184-05	PIN ASSY				K1KM1
CN5			E40-9184-05	PIN ASSY				M3
J1			E04-0312-05	RF COAXIAL CABLE RECEPTACLE				
⚠ J2			E58-0863-15	RECTANGULAR RECEPTACLE				
J3			E58-0879-05	RECTANGULAR RECEPTACLE				
J4			E56-0834-05	CYLINDRICAL RECEPTACLE				
J5			E63-0013-05	PIN JACK				K1M2M
J5			E63-0013-05	PIN JACK				M4
J6			E63-0014-05	PIN JACK				KM1M3
P1			E23-0745-05	TERMINAL				

E : Europe
K : North America
M : Other Areas

K : KRC-409
K1 : KRC-309S
M : KRC-389W

M1 : KRC-489
M2 : KRC-389
M3 : KRC-489G

M4 : KRC-479

⚠ indicates safety critical components.

PARTS LIST

✻ New Parts
Parts without **Part No.** are not supplied.
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(X14-639x-xx)

Ref. No.	Add	New	Parts No.	Description				Destination
⚠ L1			L33-1063-15	CHOKE COIL				
L101			L40-4795-91	SMALL FIXED INDUCTOR (4.7UH,J)				
L201			L40-4795-91	SMALL FIXED INDUCTOR (4.7UH,J)				
L301			L33-1123-05	LINE FILTER COIL (52MH)				
L307			L40-4795-91	SMALL FIXED INDUCTOR (4.7UH,J)				
X1			L77-1163-05	CRYSTAL RESONATOR (4.5MHZ)				
X1			L77-1165-05	CRYSTAL RESONATOR (4.5MHZ)				
X1			L77-2025-05	CRYSTAL RESONATOR (4.5MHZ)				
D	2D		N83-3005-46	PAN HEAD TAPTITE SCREW				
F	2D		N83-3016-46	PAN HEAD TAPTITE SCREW				
G	2D		N83-3010-46	PAN HEAD TAPTITE SCREW				
P	2D		N80-3008-46	PAN HEAD TAPTITE SCREW				
CP1			R90-1049-05	MULTIPLE RESISTOR				
R1			RD14BB2C472J	RD	4.7K	J	1/6W	
R2			RD14BB2C472J	RD	4.7K	J	1/6W	M2MM1
R2			RD14BB2C472J	RD	4.7K	J	1/6W	M3M4
R10			RD14BB2C203J	RD	20K	J	1/6W	
R11			RK73GB1J103J	CHIP R	10K	J	1/16W	
R12			RK73GB1J104J	CHIP R	100K	J	1/16W	
R13			RK73GB1J103J	CHIP R	10K	J	1/16W	
R14			RD14BB2C823J	RD	82K	J	1/6W	
R15			RD14BB2C563J	RD	56K	J	1/6W	
R16			RK73GB1J104J	CHIP R	100K	J	1/16W	
R20			RD14DB2H332J	SMALL-RD	3.3K	J	1/2W	
R21 ,22			RD14BB2C104J	RD	100K	J	1/6W	
R23			RK73GB1J393J	CHIP R	39K	J	1/16W	
R50			RD14BB2C222J	RD	2.2K	J	1/6W	
R51			RK73GB1J473J	CHIP R	47K	J	1/16W	
R52			RD14BB2C224J	RD	220K	J	1/6W	
R53			RD14BB2C224J	RD	220K	J	1/6W	M2MM1
R53			RD14BB2C224J	RD	220K	J	1/6W	M3M4
R54 ,55			RK73GB1J104J	CHIP R	100K	J	1/16W	
R56			RK73GB1J393J	CHIP R	39K	J	1/16W	
R57			RK73GB1J393J	CHIP R	39K	J	1/16W	M2MM1
R57			RK73GB1J393J	CHIP R	39K	J	1/16W	M3M4
R101			RD14BB2C102J	RD	1.0K	J	1/6W	
R102			RK73GB1J104J	CHIP R	100K	J	1/16W	
R103			RK73EB2B561J	CHIP R	560	J	1/8W	
R104			RD14BB2C471J	RD	470	J	1/6W	
R105			RK73EB2B561J	CHIP R	560	J	1/8W	
R107			RK73GB1J104J	CHIP R	100K	J	1/16W	
R108,109			RK73GB1J471J	CHIP R	470	J	1/16W	
R111			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R112			RK73GB1J472J	CHIP R	4.7K	J	1/16W	
R113			RD14BB2C472J	RD	4.7K	J	1/6W	
R121,122			RD14BB2C104J	RD	100K	J	1/6W	
R123			RK73GB1J223J	CHIP R	22K	J	1/16W	
R131			RK73GB1J104J	CHIP R	100K	J	1/16W	
R132			RK73GB1J472J	CHIP R	4.7K	J	1/16W	
R133			RD14BB2C103J	RD	10K	J	1/6W	
R134			RK73GB1J473J	CHIP R	47K	J	1/16W	
R136			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R137			RD14BB2C103J	RD	10K	J	1/6W	
R138			RK73GB1J223J	CHIP R	22K	J	1/16W	

Ref. No.	Add	New	Parts No.	Description				Destination
R139			RK73GB1J473J	CHIP R	47K	J	1/16W	
R141			RD14BB2C102J	RD	1.0K	J	1/6W	
R142			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R143			RK73GB1J472J	CHIP R	4.7K	J	1/16W	
R144			RK73GB1J223J	CHIP R	22K	J	1/16W	KM1M3
R145			RK73GB1J223J	CHIP R	22K	J	1/16W	KM1M3
R145			RK73GB1J223J	CHIP R	22K	J	1/16W	K1
R146			RD14BB2C102J	RD	1.0K	J	1/6W	
R147,148			RK73GB1J102J	CHIP R	1.0K	J	1/16W	
R149			RK73GB1J472J	CHIP R	4.7K	J	1/16W	
R150			RD14BB2C223J	RD	22K	J	1/6W	
R151,152			RK73GB1J103J	CHIP R	10K	J	1/16W	
R161,162			RK73GB1J103J	CHIP R	10K	J	1/16W	
R183			RK73GB1J103J	CHIP R	10K	J	1/16W	M1M3
R183			RK73GB1J103J	CHIP R	10K	J	1/16W	M2MM4
R184			RK73GB1J103J	CHIP R	10K	J	1/16W	M2MM4
R184			RK73GB1J103J	CHIP R	10K	J	1/16W	K1
R186			RK73GB1J103J	CHIP R	10K	J	1/16W	
R187			RK73EB2B102J	CHIP R	1.0K	J	1/8W	
R188			RK73GB1J225J	CHIP R	2.2M	J	1/16W	
R193			RD14BB2C102J	RD	1.0K	J	1/6W	
R194			RD14BB2C470J	RD	47	J	1/6W	
R196			RK73EB2B241J	CHIP R	240	J	1/8W	
R197			RD14BB2C102J	RD	1.0K	J	1/6W	
R198			RD14BB2C100J	RD	10	J	1/6W	
R201			RK73GB1J272J	CHIP R	2.7K	J	1/16W	
R202,203			RK73GB1J472J	CHIP R	4.7K	J	1/16W	
R221,222			RD14BB2C271J	RD	270	J	1/6W	KM1M3
R223,224			RD14BB2C271J	RD	270	J	1/6W	
R225,226			RK73GB1J303J	CHIP R	30K	J	1/16W	KM1M3
R227,228			RK73GB1J303J	CHIP R	30K	J	1/16W	
R229,230			RD14BB2C101J	RD	100	J	1/6W	KM1M3
R231,232			RD14BB2C101J	RD	100	J	1/6W	
R251-254			RD14BB2C472J	RD	4.7K	J	1/6W	
R255			RK73GB1J333J	CHIP R	33K	J	1/16W	
R256			RK73FB2A102J	CHIP R	1.0K	J	1/10W	
R257			RD14BB2C362J	RD	3.6K	J	1/6W	
R258			RK73FB2A101J	CHIP R	100	J	1/10W	
R259			RK73GB1J223J	CHIP R	22K	J	1/16W	
R260			RK73GB1J751J	CHIP R	750	J	1/16W	
R261			RK73GB1J431J	CHIP R	430	J	1/16W	
R262			RK73GB1J184J	CHIP R	180K	J	1/16W	
R301			RD14BB2C151J	RD	150	J	1/6W	
R401,402			RD14BB2C100J	RD	10	J	1/6W	
R403			RD14BB2C4R7J	RD	4.7	J	1/6W	
R404			RD14BB2C101J	RD	100	J	1/6W	
R405-409			RD14BB2C472J	RD	4.7K	J	1/6W	
R410,411			RD14BB2C101J	RD	100	J	1/6W	
R412			RK73GB1J104J	CHIP R	100K	J	1/16W	
R415			RK73GB1J104J	CHIP R	100K	J	1/16W	
R501			RK73FB2A4R7J	CHIP R	4.7	J	1/10W	
R502			RK73GB1J184J	CHIP R	180K	J	1/16W	
R503			RK73GB1J162J	CHIP R	1.6K	J	1/16W	
R504			RK73GB1J243J	CHIP R	24K	J	1/16W	
R505			RK73GB1J183J	CHIP R	18K	J	1/16W	K1KM1

E : Europe
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M1 : KRC-489
M2 : KRC-389
M3 : KRC-489G

M4 : KRC-479

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PARTS LIST

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(X14-639x-xx)

Ref. No.	Add	New	Parts No.	Description				Destination
R505			RK73GB1J183J	CHIP R	18K	J	1/16W	M3
R511,512			RK73GB1J153J	CHIP R	15K	J	1/16W	
R513,514			RK73GB1J151J	CHIP R	150	J	1/16W	
R515,516			RK73GB1J123J	CHIP R	12K	J	1/16W	
R517,518			RK73GB1J334J	CHIP R	330K	J	1/16W	
R519,520			RK73GB1J512J	CHIP R	5.1K	J	1/16W	M2MM4
R521,522			RK73GB1J432J	CHIP R	4.3K	J	1/16W	M2MM4
R523,524			RK73GB1J183J	CHIP R	18K	J	1/16W	KM1M3
R532			RK73FB2A471J	CHIP R	470	J	1/10W	
R533			RK73GB1J471J	CHIP R	470	J	1/16W	
R534			RK73GB1J104J	CHIP R	100K	J	1/16W	
R535			RD14BB2C471J	RD	470	J	1/6W	
R537			RD14BB2C220J	RD	22	J	1/6W	
R551			RD14BB2C103J	RD	10K	J	1/6W	
R552			RD14DB2H102J	SMALL-RD	1.0K	J	1/2W	
R553			RK73FB2A471J	CHIP R	470	J	1/10W	
R555			RK73FB2A471J	CHIP R	470	J	1/10W	
VR1 ,2			R12-3100-05	TRIMMING PC	(10K)			K1KM1
VR1 ,2			R12-3100-05	TRIMMING PC	(10K)			M3
W501,502			R92-2053-05	CHIP R	0	J	1/8W	
W503,504			R92-1252-05	CHIP R	0 OHM			
W505			R92-2053-05	CHIP R	0	J	1/8W	
W506-509			R92-1252-05	CHIP R	0 OHM			
W510			R92-2053-05	CHIP R	0	J	1/8W	
W511,512			R92-1252-05	CHIP R	0 OHM			
D1			S2V20 ✻ A	DIODE				
D2			1GWJ43(TPB5)	DIODE				
D3			AM01Z	DIODE				
D3			ERA15-01	DIODE				
D4			1GWJ43(TPB5)	DIODE				M2MM1
D4			1GWJ43(TPB5)	DIODE				M3M4
D5			AM01Z	DIODE				M2MM1
D5			AM01Z	DIODE				M3M4
D5			ERA15-01	DIODE				M2MM1
D5			ERA15-01	DIODE				M3M4
D10 ,11			MA4068(N)-M	ZENER DIODE				
D20			HZS5C1	ZENER DIODE				
D20			MA4051-L	ZENER DIODE				
D102,103			HZS6C1	ZENER DIODE				
D102,103			MA4062-L	ZENER DIODE				
D106			HZS6C1	ZENER DIODE				
D106			MA4062-L	ZENER DIODE				
D108			HZS6C1	ZENER DIODE				
D108			MA4062-L	ZENER DIODE				
D201			1SS133	DIODE				
D251-253			1SS133	DIODE				
D301			MA4051(N)-M	ZENER DIODE				
D401,402			MA4068(N)-M	ZENER DIODE				
D403-405			HZS6C1	ZENER DIODE				
D403-405			MA4062-L	ZENER DIODE				
D407-409			HZS6C1	ZENER DIODE				
D407-409			MA4062-L	ZENER DIODE				
D551			AM01Z	DIODE				
D551			ERA15-01	DIODE				
IC1		✻	LC72366-9996	MI-COM IC				

Ref. No.	Add	New	Parts No.	Description	Destination
IC2			TDA7407D	ANALOGUE IC	
IC4			TDA7386	ANALOGUE IC	
IC5			HA12216F	ANALOGUE IC	K1KM1
IC5			HA12216F	ANALOGUE IC	M3
IC5			HA12221F	ANALOGUE IC	M2MM4
IC6			LB1930M	ANALOGUE IC	
IC7			TDA3682ST	ANALOGUE IC	
IC10			HD74HC27FP	MOS-IC	
Q10 ,11			2SC4081	TRANSISTOR	
Q10 ,11			2SD1819A	TRANSISTOR	
Q41			DTA124EUA	DIGITAL TRANSISTOR	
Q41			UN5112	DIGITAL TRANSISTOR	
Q50			2SA1036K	TRANSISTOR	
Q51			2SC4081	TRANSISTOR	M2MM1
Q51			2SC4081	TRANSISTOR	M3M4
Q51			2SD1819A	TRANSISTOR	M2MM1
Q51			2SD1819A	TRANSISTOR	M3M4
Q52			2SC4081	TRANSISTOR	
Q52			2SD1819A	TRANSISTOR	
Q190,191			DTA114YUA	DIGITAL TRANSISTOR	
Q190,191			UN5114	DIGITAL TRANSISTOR	
Q221,222			DTC143TUA	DIGITAL TRANSISTOR	KM1M3
Q221,222			UN5216	DIGITAL TRANSISTOR	KM1M3
Q223,224			DTC143TUA	DIGITAL TRANSISTOR	
Q223,224			UN5216	DIGITAL TRANSISTOR	
Q251			DTC114YUA	DIGITAL TRANSISTOR	
Q251			UN5214	DIGITAL TRANSISTOR	
Q501			2SD1760	TRANSISTOR	
Q551			2SB1443	TRANSISTOR	
Q552			DTC114EUA	DIGITAL TRANSISTOR	
Q552			UN5211	DIGITAL TRANSISTOR	
TH1			PTH9C42BE471Q	POSITIVE RESISTOR	
A1	2D	✻	X86-3280-11	TUNER UNIT	

CASSETTE MECHANISM ASSY (D40-1150-05)

1	2A		A10-4329-08	CHASSIS ASSY
2	1A		J21-7779-08	MOUNTING HARDWARE
3	2B		A11-0931-08	SUB CHASSIS ASSY
4	1A		D10-4106-08	ARM
5	2A		D10-4107-08	ARM
6	2A		D10-4108-08	ARM
7	2B		D10-4109-08	ARM
8	2A		D10-4110-08	ARM ASSY
9	2A		D10-4111-08	ARM ASSY
10	3A		D10-4112-08	ARM
13	2A		D10-4113-08	ARM
14	1B		D13-1324-08	GEAR ASSY
15	3A		D01-0614-08	FLYWHEEL ASSY
16	2A		D13-1325-08	GEAR ASSY
17	2A		D10-4114-08	ARM ASSY
18	3A		D01-0615-08	FLYWHEEL ASSY
19	3A		D13-1326-08	GEAR ASSY
22	2B		D10-4115-08	SLIDER
23	3B		D10-4116-18	SLIDER
24	1B		J21-7780-08	MOUNTING HARDWARE

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M3 : KRC-489G

M4 : KRC-479

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PARTS LIST

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(D40-1150-05)

Ref. No.	Add	New	Parts No.	Description	Destination
25	1B		D10-4117-18	ARM	
26	1B		D10-4118-08	SLIDER	
27	1A		A52-0716-08	HOLDER	
32	1B		J90-0767-08	GUID	
33	1B		J19-4737-08	BRACKET	
34	1B		D12-0622-08	CAM	
35	2B		D13-1327-08	GEAR	
36	2B		D13-1328-08	GEAR	
37	3A		D13-1329-08	GEAR	
38	3A		D10-4119-08	ARM	
39	1B		D13-1330-08	GEAR	
40	2A		D13-1331-08	GEAR	
41	2A		D13-1332-08	GEAR	
42	2B		J11-0619-08	CLAMPER	
43	1B		D13-1333-08	GEAR	
44	1B		D13-1334-08	GEAR	
45	2A		D13-1335-08	GEAR	
46	2B		D10-4120-08	ARM	
47	2B		J19-4738-08	HOLDER	
48	2B		J11-0620-08	CLAMPER	
52	2A		D03-0312-08	REEL DISK	
53	3A		D15-0913-08	PULLEY	
55	1A		D10-4121-08	SLIDER	
57	1B		D13-1337-08	GEAR	
59	2B		J31-1036-08	COLLAR	
62	3B		D14-0683-08	ROLLER	
63	1A		D14-0684-08	ROLLER	
67	2A		G01-2832-08	TORSION COIL SPRING	
68	2A		G01-2833-08	TORSION COIL SPRING	
69	2B		G01-2834-08	TENSION COIL SPRING	
70	1B		G01-2835-08	TORSION COIL SPRING	
71	1B		G01-2836-08	TORSION COIL SPRING	
73	1A		G09-2020-08	SPRING	
74	2A		G01-2837-08	COMPRESSION COIL SPRING	
75	1B		G01-2838-08	TORSION COIL SPRING	
76	1A		G01-2839-08	TORSION COIL SPRING	
77	2A		G01-2843-08	TORSION COIL SPRING	
79	1A		G01-2840-08	TENSION COIL SPRING	
80	3A		G01-2841-08	TENSION COIL SPRING	
83	3A		D16-0609-08	BELT	
94	3A		S64-0807-08	LEVER SWITCH	
95	3A		S64-0808-08	LEVER SWITCH	
100	2B		E30-4460-08	CONNECTOR ASSY (10P)	
102	2B		T95-0213-08	PHOTO COUPLER	
103	2B		S62-0858-08	SLIDE SWITCH	
105	2B		S74-0813-08	LEAF SWITCH	
107	3A		E30-4468-08	CONNECTOR ASSY (7P)	
A	1B		N09-4193-08	SCREW	
B	1B		N09-4194-08	SCREW	
C	3A		N09-4195-08	SCREW	
D	1B		N09-4196-08	SCREW	
E	2A		N09-4197-08	SCREW	
F	1B		N09-4198-08	SCREW	
G	1A		N09-4199-08	SCREW	
H	2B		N09-4200-08	SCREW	
L	3A		N19-2087-08	FLAT WASHER	
M	1B		N19-2088-08	FLAT WASHER	
N	1B		N19-2135-08	FLAT WASHER	
P	3A		N19-2146-08	FLAT WASHER	
Q	2A		N19-2091-08	FLAT WASHER	
R	1A		N19-2092-08	FLAT WASHER	
S	2B		N29-0510-08	RETAINING RING	
HD1	1B		T31-0220-08	PLAYBACK HEAD	
M1	1A		T42-0759-18	MOTOR ASSY (MAIN)	
M2	1B		T42-1005-08	MOTOR ASSY (SUB)	

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M4 : KRC-479

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KRC-309S/389/389W,409/479,489/489G

SPECIFICATIONS

		KRC-309S (K) KRC-409 (K)	KRC-489 (M)	KRC-389 (M) KRC-389W (M) KRC-479 (M) KRC-489G (M)
		TDF	TDF	TDF
Tuner Type		CR2	CR2	CR2
FM	Frequency Range (Frequency Step)	87.9MHz-107.9MHz (200KHz)	87.5MHz-108.0MHz (50KHz)	87.5MHz-108.0MHz (50KHz)
	Channel Space Selection	50KHz/200KHz	50KHz/200KHz	50KHz/200KHz
	Usable Sensitivity (S/N 30dB)	9.3dBf (0.8 μV/75Ω)	9.3dBf (0.8 μV/75Ω)	9.3dBf (0.8 μV/75Ω)
	Quieting Sensitivity (S/N 50dB)	15.2dBf (1.6 μV/75Ω)	15.2dBf (1.6 μV/75Ω)	15.2dBf (1.6 μV/75Ω)
	Frequency Response (±3.0dB)	30Hz-15KHz	30Hz-15KHz	30Hz-15KHz
	S/N	70dB (MONO)	70dB (MONO)	70dB (MONO)
	Selectivity	≧80dB (±400KHz)	≧80dB (±400KHz)	≧80dB (±400KHz)
	Stereo Separation	40dB (1KHz)	40dB (1KHz)	40dB (1KHz)
AM	Frequency Range (Frequency Step)	530KHz-1700KHz (10KHz)	531KHz-1611KHz (9KHz)	531KHz-1611KHz (9KHz)
	Channel Space Selection	9KHz/10KHz	9KHz/10KHz	9KHz/10KHz
	Usable Sensitivity (S/N 20dB)	28dBμ (25μV)	28dBμ (25μV)	28dBμ (25μV)
CASSETTE	Tape Speed	4.76cm/sec.	4.76cm/sec.	4.76cm/sec.
	Wow/Flutter	0.08% (WRMS)	0.08% (WRMS)	0.08% (WRMS)
	Frequency Response (±3.0dB)	30Hz-18KHz (70 μs)	30Hz-18KHz (70 μs)	30Hz-14KHz (120 μs)
	Separation	43dB (1KHz)	43dB (1KHz)	43dB (1KHz)
	S/N Dolby NR OFF S/N Dolby B NR ON	57dB 65dB	57dB 65dB	54dB -
Preout Level / Load		1800mV/10KΩ	1800mV/10KΩ	1800mV/10KΩ
Preout Impedance		≦600Ω	≦600Ω	≦600Ω
AMPLIFIER	Maximum Power	45W x4	45W x4	45W x4
	Full Bandwidth Power (at less than 1% THD)	22W x4	22W x4	22W x4
TONE	Bass	100Hz ±10dB	100Hz ±10dB	100Hz ±10dB
	Middle	1KHz ±10dB	1KHz ±10dB	1KHz ±10dB
	Treble	10KHz ±10dB	10KHz ±10dB	10KHz ±10dB
GENERAL	Operating Voltage (11V-16V allowable)	14.4V	14.4V	14.4V
	Current Consumption	10A	10A	10A
	Installation Size (Width) (Height) (Depth)	182mm 53mm 152mm	182mm 53mm 152mm	182mm 53mm 152mm
	Weight	1300g	1300g	1300g

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

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